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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,226	03/20/2001	Kenichi Kawai	FUJA 17.344	3401

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EXAMINER
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VINCENT, DAVID ROBERT

ART UNIT	PAPER NUMBER
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3628

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/813,226

Applicant(s)

KAWARAI ET AL.

Examiner

David R. Vincent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-52 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

In response to the election/response filed 1/20/05, the examiner agrees claims 14-17, and 20-21 were inadvertently left out of the restriction requirement.

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-13, drawn to group I, classified in class 370, subclass 466.
- II. Claim 18, drawn to group II, classified in class 370, subclass 431.
- III. Claim 19, drawn to group III, classified in class 370, subclass 437.
- IV. Claims 44-51, drawn to group IV, classified in class 370, subclass 412.
- V. Claims 14-17, 20-21, drawn to group IV, classified in class 370, subclass 450.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and I-V are related as combination (I) and subcombinations (I-V). Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as

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claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)).

In the instant case, the combination as claimed does not require the particulars of the subcombinations as claimed because **group II** calls for determining and posting QoS classes; **group III** calls for counting packets, **group IV** calls for storing and queuing packets, **group V** calls for a scheduling device that uses tokens to determine when to read a packet that has been queued; and **group I** especially claim 1, is directed towards converting variable length packets to fixed length packets switching the fixed length packets and converting the fixed length packets to variable length packets.

The subcombination II has separate utility such as counting, packets;

subcombination III has separate utility such as counting packets using a second counter;

subcombination IV has separate utility such as a queuing device; and

subcombination V has separate utility such as a scheduling device that uses tokens to determine when to read a packet that has been queued.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by

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their different classification, restriction for examination purposes as indicated is proper.

- B. Claim 22, drawn to group B, classified in class 370, subclass 231.
- C. Claim 23, drawn to group C, classified in class 370, subclass 232.
- D. Claim 24, drawn to group D, classified in class 370, subclass 390.
- E. Claims 25, and 42, drawn to group E, classified in class 370, subclass 392.
- F. Claim 26, drawn to group F, classified in class 370, subclass 352.
- G. Claims 27 and 43, drawn to group G, classified in class 370, subclass 395.7.
- H. Claims 28-33, drawn to group H, classified in class 370, subclass 395.43.
- J. Claims 34-41, drawn to group J, classified in class 370, subclass 414.
- K. Claim 52, drawn to group K, classified in class 370, subclass 395.42.

Inventions B-K are related as subcombinations disclosed as usable together in a single combination. The subcombinations

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are distinct from each other if they are shown to be separately usable See MPEP § 806.05(d). In the instant case:

invention B has separate utility such as a variable length packet drop control circuit which multiplies a difference between a volume of packets and a threshold and uses a register, an adder and a control circuit;

invention C has separate utility such as fixed length packet drop control circuit which outputs differences between a volume of packets and a threshold and uses a register, an adder and a control circuit. invention D has separate utility such as a multicast circuit;

invention E has separate utility such as a switch that maps QoS classes into priority classes;

invention F has separate utility such as a switch that maps IP classes into priority classes;

invention G has separate utility such as a switch that converts IP packets into fixed length packets, maps IP classes into priority classes, and controls the reading of packets;

invention H has separate utility such as a QoS device that uses three selectors;

invention J has separate utility such as a queuing circuit (which does not convert variable to fixed length packets) with contention for outputs; and

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invention K has separate utility such as a switch that maps QoS classes into high and low priority groups and selects classes.


4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R. Vincent whose telephone number is 571 272 3080. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sam Sough can be reached on 571 272 6799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David R. Vincent  
Primary Examiner  
Art Unit 3628

June 20, 2005